

Date: Wednesday, 3/8/2006 10:38:22 AM
 User: Kim Johnston

Process Sheet

Customer	: CU-DAR001 Dart Helicopters Services	Drawing Name	: VERTICAL TUBE
Job Number	: 26119		
Estimate Number	: 12312		
P.O. Number	: N/A	Part Number	: D34735
This Issue	: 3/8/2006 S.O. No. : N/A	Drawing Number	: D3473 REV A
Prsht Rev.	: NC	Project Number	: N/A
First Issue	: N/A Type : PURCHASED PARTS	Drawing Revision	: A
Previous Run	: N/A	Material	: N/A
Written By	: <u>See comment below.</u>	Due Date	: 3/31/2006
Checked & Approved By	: <u>06.03.08</u>	Qty:	10 Um: Each
Comment	: Est Rev:A New Issue 06-03-02 JLM		

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	PG	PURCHASING
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Comment: Issue P/O: 00000768 06/03/09
 E-mail or Ship DXF file to vendor
 Laser cut flat pattern as per Dwg D3473
 Possible supplier: Ind. Laser
 Material release note is required.

2.0	D34735F	VERTICAL TUBE FLAT PATTERN
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Comment: Qty.: 1.0000 sf(s)/Unit Total : 8.0000 sf(s)
 FLANGE PLATE

3.0	PACKAGING 1	PACKAGING RESOURCE #1
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Comment: PACKAGING RESOURCE #1
 Receive & Inspect For Transit Damage
 Ensure material certification is attached

4.0	QC6	DIMENSIONAL CHECK
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Comment: DIMENSIONAL CHECK

5.0	SMALL FAB 1	SMALL & MEDIUM FAB RESOURCE 1
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Comment: SMALL & MEDIUM FAB RESOURCE 1

1-Debur if necessary.

Spot weld after
 2-Roll & Bead as per Dwg D3473

SB

06/04/24

(9)

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
		One taken for template	VB	0032	1	VB 05/21/24	VB 0032-29

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes ☐ No ☒ DQA: ☒ Date: 06/04/24
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Wednesday, 3/8/2006 10:38:22 AM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: VERTICAL TUBE

Job Number: 26119

Part Number: D34735

Job Number:



Seq. #:

Machine Or Operation:

Description :

3-Spot weld as per Dwg D3473

6.0

QC5/9/

WELD INSPECTION



Comment: WELD INSPECTION

AD 06.01.23 (9)

7.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: _____

AD 06.04.26 (2)

Job Completion



Level 21 inspection

AD 06.04.26 (2)

U 06.04.26

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

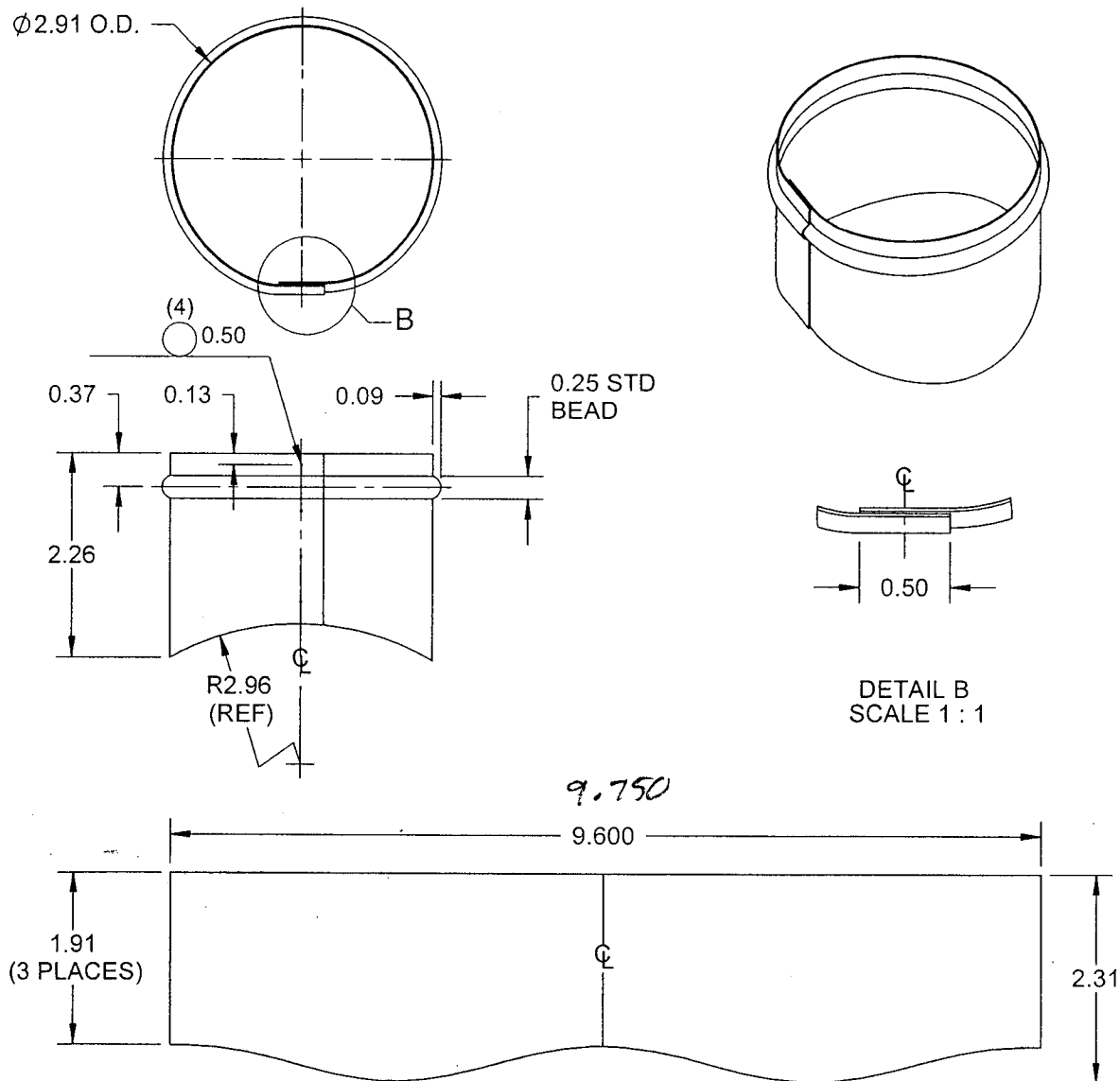
QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

PRELIMINARY ISSUE

DESIGN	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED	APPROVED	DRAWING NO. D3473	REV. A SHEET 5 OF 7
DATE 06.02.07	TITLE BLOWER INLET ADAPTER		SCALE 1:2



D3473-5F VERTICAL TUBE FLAT PATTERN

NOTES:

- 1) MATERIAL: AISI 304/316 SS SHEET PER MIL-S-5019 (ANNEALED) 2B FINISH
26 GAUGE SS (0.018 THICK)
- 2) SPOT WELD PER DART QSI 004
- 3) FINISH: NONE
- 4) FLAT PATTERN IS SYMMETRICAL ABOUT CENTERLINE
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 6) ALL DIMENSIONS ARE IN INCHES
- 7) BREAK ALL SHARP EDGES 0.005 TO 0.010

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Ryerson

MAY-17-2005 10:05

3/17/06

LSX-945-509

AK Steel		AK Steel Corporation Metallurgical Test Report Cleveland Works Cleveland, OH 44112		Page 1
CUSTOMER INTEGRIS METALS PO BOX 340 MINNEAPOLIS, MN 55440		WARRANTY 306 'B' STREET AUBURN, WA 98001		Lead No. 710672 ERN No. 710672
SKID ID SK 0713143 SK 0713144 SK 0713145 SK 0713146		HEAT 715051 715051 715051 715051		PHILLIPS ORDER NO. 77215-0191 PAINT NO. 71451491
REMARKS NO INTENTIONAL ADDITIONS OF MERCURY OR MERCURY COMPOUNDS, RADIUM, ALPHA SOURCE, AND LOW MELTING ALLOYS OR ELEMENTS CAPABLE OF FORMING LOW MELTING ALLOYS WERE MADE THROUGHOUT THE PROCESSING OF THIS MATERIAL.		NET WEIGHT 3,465 LBS. 402 KG. 3,470 LBS. 403 KG. 3,453 LBS. 400 KG. 3,441 LBS. 397 KG. TOTAL NET WEIGHT 13,829 LBS. 16,075 KG.		PHILLIPS ORDER NO. 77215-0191 PAINT NO. 71451491 EXHAUSTION UNITS --PRODUCT-- 118 NOM 43,000 X COIL
PRODUCT DESCRIPTION CR STEEL TYPE 304 STAINLESS STEEL FINISH SLIT EDGE 1/2" X 36" X 118' REELS HAVE BEEN HOT UNLEADED TO OR NOTED OTHERWISE * A STEEL 240 -04 EX PARA 3.1.1 SLOWS WILL BE DETERMINED BY ASTM E 8 * ASTM A 490 -01 EX PARA 3.1.1 SLOWS WILL BE DETERMINED BY ASTM E 8 EX PARA 26.1.1.3 COIL WILL BE TAPPED ON OUTSIDE ONLY * ASTM A 566 -03 * DP-001 Rev 0, * 125-011 0 * BUYER PURCH 74251491 * ASME SA-240 SECTION II PART B (2001 ED. 2002 ADDENDA) EX PARA 3.1.1 SLOWS WILL BE DETERMINED BY ASTM E 8 * EX-10204 3.1.1		REMARKS NO INTENTIONAL ADDITIONS OF MERCURY OR MERCURY COMPOUNDS, RADIUM, ALPHA SOURCE, AND LOW MELTING ALLOYS OR ELEMENTS CAPABLE OF FORMING LOW MELTING ALLOYS WERE MADE THROUGHOUT THE PROCESSING OF THIS MATERIAL.		SHIPPING DATE: 09/17/03
ANALYSIS ID C MN P S SI CR NI MO N CU CO L 72051 .043 1.39 .027 .001 .35 18.18 8.05 .35 .04 .30 .12		CHEMICAL ANALYSIS L-Cube Analysis of Heat P-Product Analytical Patent Conf		REMARKS NO INTENTIONAL ADDITIONS OF MERCURY OR MERCURY COMPOUNDS, RADIUM, ALPHA SOURCE, AND LOW MELTING ALLOYS OR ELEMENTS CAPABLE OF FORMING LOW MELTING ALLOYS WERE MADE THROUGHOUT THE PROCESSING OF THIS MATERIAL.
PHILLIPS ORDER NO. 77215-0191 PAINT NO. 71451491 EXHAUSTION UNITS --PRODUCT-- 118 NOM 43,000 X COIL		REMARKS NO INTENTIONAL ADDITIONS OF MERCURY OR MERCURY COMPOUNDS, RADIUM, ALPHA SOURCE, AND LOW MELTING ALLOYS OR ELEMENTS CAPABLE OF FORMING LOW MELTING ALLOYS WERE MADE THROUGHOUT THE PROCESSING OF THIS MATERIAL.		SHIPPING DATE: 09/17/03

Fax Server

T-726 P.008/015 F-527

002/004

MATERIAL TEST REPORT

From: NORTH AMERICAN STAINLESS CANADA, IN
740 IMPERIAL ROAD NORTH

Page : 1
Heat/Lot : 86K8
TIN : B42748

Sold To: INTEGRIS METALS, LTD.
7910 40TH STREET SE
CALGARY, AB T2C2Y3

Ship To: ***CUSTOMER PICKUP***
4375 14TH STREET NORTHEAST
CALGARY
ABT3E7A9

Vendor Information

Cust PO #: 406824

Cust PO DT: 11/03/05

Specifications

STAINLESS STEEL SHEET, COLD ROLLED, ANNEALED AND PICKLED.
ASTMA240/04a 480/04a, 666/03, ASME SA240/04-A05, 480/04-A05, SA666/04
Q08766D-A X 1/8 PRM, AMS5513H X MRK&FIN, MILS059D, AMD3, X CRWN MEAS
CORROSION: ASTM A262/02aE; 180Bend-OK
Buyer Part: 4288441
304 2B .1305 IN 48 IN 96 IN
Country of Origin: UNITED STATES

Mechanical Tests

		UOM	L	O	UOM	L	O
Yield Strength - 0.2% Offset	40	KSI	F	TRANSV			
Tensile Strength (UTS)	93.3	KSI	F	TRANSV			
Rockwell B	85		F	TRANSV			
Pct Uniform Elong 2 In/50mm	57.01	PCT	F	TRANSV			
Rockwell A	85		T	TRANSV			

Chemical Composition

C Carbon-Pct	.059	CR Chromium-Pct	18.360
CU Copper-Pct	.342	MN Manganese-Pct	1.643
MO Molybdenum-Pct	.285	N Nitrogen-Pct	.037
NI Nickel-Pct	8.150	P Phosphorus-Pct	.029
SI Silicon-Pct	.289		

Comments

MATERIAL TEST REPORT

From: NORTH AMERICAN STAINLESS CANADA, IN
740 IMPERIAL ROAD NORTH

Page : 2
Heat/Lot : 86K8
TIN : B42748

Material free from mercury contamination. No weld repairs.
EN 10204 3.1 PED 97/23/EC Annex1, Para. 4.3 Q08763F Cond A
This document certifies the material has been tested in
accordance with applicable specifications described herein
and has met those requirements.

QA by ERIC HESS 02/01/2006

Miscellaneous Data

GURUPH , ORN K123
Control #: 50C60214
Part #: 74271441
.135 X 48 X 96

Date: 03/17/06

SOLD TO: INDA LAFER

TO 110880

S/O 90-374786 - 02

[Signature] 3/17/06

The Chemical Analysis and Mechanical Test
data was received via EDI from the above
mentioned vendor.

INTEGRIS METALS, LTD.